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MEMORANDUM

DATE: September 10, 2012

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington

TO: Jeff Fetters, START-3 Project Manager, Seattle, Washington

SUBJ: **Organic Data Quality Summary Check,**
Fourth Avenue and Gamble Parking Lot Site, Anchorage, Alaska

REF: TDD: 12-01-0004 PAN: 002233.0757.01SI

The data summary check of two Gore Sorber™ air filter samples collected from the Fourth Avenue and Gamble Parking Lot site in Anchorage, Alaska, has been completed. Volatile Organic Compound (VOC) analysis (EPA modified Method 8260) was performed by Gore Labs, Inc., Elkton, Maryland. All sample analyses were evaluated following EPA's Stage 2 Data Validation Manual Process (S2VM). The samples were numbered:

BK01SG-00689995 TB03SG-00689994

Data Qualifications:

Raw data and summary results were not provided for these samples and analyses. The following information was provided in the Case Narrative by the analytical laboratory:

For this project, the analytical method, results, and observations reported do [√] do not [ ] fall within the scope of W. L. Gore's ISO 17025 accreditation. **US EPA 8260C Method**

The GORE® Modules are analyzed at Gore's fixed laboratory using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation following U.S. EPA Method 8260 (SPG-WI-0318), and include the following:

BFB Tuning Frequency: Analyze a tune at the start of each analytical run and every 12 hours of analysis.

Initial Calibration: A minimum of a five point calibration curve is analyzed prior to the analysis of samples. All values reported below the low level standard and above the reporting limit are flagged with a "J".

Linearity of Target Compounds: If the RSD of any target analyte is less than or equal to 15% then average response factor can be used for quantitation. If the RSD exceeds 15% for a target compound a regression equation can be used for quantitation. A minimum of 5 calibration levels are required for linear regression. A minimum of 6 calibration levels are required for quadratic regression. When using a linear or quadratic fit, do not force intercept through 0.

Initial Calibration Verification: After calibration curve is analyzed and before samples are analyzed the initial calibration curve must be verified using a second source standard and must meet 8260C criteria.

Continuing Calibration Verification: Every 12 hours a continuing calibration standard is analyzed near the mid-point of the calibration and must meet 8260C criteria. Every analytical batch must have an ending continuing calibration verification standard.

Laboratory Control Sample: Every 12 hours a second-source reference standard is analyzed near the mid-point of the calibration curve and must meet 8260C criteria.

Method Blank: Analyzed prior to the analysis of field samples and every 12 hours of analysis.

Internal Standard: Introduced to all QC samples (standards, method blanks, ICV, CCV's) and samples including trip and field blanks.

Surrogate: Introduced to all QC samples (standards, method blanks, ICV, CCV's) and samples including trip and field blanks. Acceptance limits must meet 8260C criteria or laboratory determined limits if limits are not found in analytical method.

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Method deviations: The initial calibration verification sample showed low recoveries for BTEX, 1,3,5- & 1,2,4-trimethylbenzenes, and 1,2- 1,3- and 1,4-dichlorobenzenes. Analysis of a standard prepared from a third lot of material verified that the ICV standard was prepared by the manufacturer incorrectly. Recoveries of the check standard were all within acceptable limits. The method deviation did not affect the sample results and data was reported without qualifiers.

1. Sample Holding Times: Acceptable.

The samples were collected on August 16, 2012, and were analyzed by August 24, 2012, therefore meeting QC holding time criteria of less than 14 days between collection and analysis; soil criteria were used in the absence of Gore Sorber™ limits.

2. Overall Assessment of Data for Use

There were no detections in the trip blank.

The overall usefulness of the data is based on the criteria outlined in the Site-Specific Sampling Plan and/or Sampling and Quality Assurance Plan, the OSWER Guidance Document "Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan, and Data Validation Procedures" (EPA/540/G-90/004), the analytical method, and, when applicable, the Office of Emergency and Remedial Response Publication "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review". Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

JH - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a high bias.

JL - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with a low bias.

JK - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias.

JQ – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample with an unknown direction of bias and falls between the MDL and the Minimum (or Practical) Quantitation Limit (MQL, PQL).

N - The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

GORE(TM) SURVEYS ANALYTICAL RESULTS
SEAGATE PROPERTIES INC, SAN RAFAEL, CA
GORE(TM) SURVEYS ANALYTICAL RESULTS
ECOLOGY AND ENVIRONMENT INC, SEATTLE, WA
GORE STANDARD TARGET VOCs/SVOCs (8260M)
1007 WEST THIRD AVE, ANCHORAGE, AK
PRODUCTION ORDER #21732946

SAMPLE NAME	DATE/ TIME INSTALLED	DATE/ TIME RETRIEVED	DATE/ TIME RECEIVED	DATE/ TIME ANALYZED		BTEX, ug	BENZ, ug	TOL, ug
MDL =							0.01	0.01
LOD =							0.04	0.04
LOQ =							0.05 U	0.05 U
689995	8/2/12 10:55 PST	8/16/12 10:01 PST	8/17/12 11:53 EST	8/24/12 14:34	EST	nd	nd	nd
689994			8/17/12 11:53 EST	8/24/12 14:05	EST	nd	nd	nd
method blank				8/24/12 10:41	EST	nd	nd	nd

(1) COMPOUND IS NOT INCLUDED IN GORE'S SCOPE OF ACCREDITATION

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SAMPLE NAME	EtBENZ, ug	mpXYL, ug	oXYL, ug	UNDEC, ug	TRIDEC, ug	TMBs, ug	124TMB, ug	135TMB, ug	ct12DCE, ug
MDL =	0.01	0.01	0.01	0.01	0.01		0.02	0.01	
LOD =	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LOQ =	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
689995	nd	nd	nd	nd	nd	nd	nd	nd	nd
689994	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd

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SAMPLE NAME	t12DCE, ug	c12DCE, ug	NAPH&2-MN, ug	NAPH, ug	2MeNAPH, ug	MTBE, ug	11DCA, ug	111TCA, ug
MDL =	0.01	0.01		0.01	0.01	0.01	0.01	0.01
LOD =	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LOQ =	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
689995	nd	nd	nd	nd	nd	nd	nd	nd
689994	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd

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SAMPLE NAME	12DCA, ug	TCE, ug	OCT, ug	PCE, ug	14DCB, ug	CHCl3, ug	CCl4, ug	112TCA, ug	CIBENZ, ug
MDL =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LOD =	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LOQ =	0.05 V	0.05 V	0.05 V	0.05	0.05 V	0.05 V	0.05 V	0.05 V	0.05 V
689995	nd	nd	nd	0.06	nd	nd	nd	nd	nd
689994	nd	nd	nd	0.05 V	nd	nd	nd	nd	nd
method blank	nd	nd	nd	0.05 U nd	nd	nd	nd	nd	nd

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SAMPLE NAME	1112TetCA, ug	1122TetCA, ug	13DCB, ug	12DCB, ug
MDL =	0.01	0.01	0.01	0.01
LOD =	0.04	0.04	0.04	0.04
LOQ =	0.05 U	0.05 U	0.05 U	0.05 U
689995	nd	nd	nd	nd
689994	nd	nd	nd	nd
method blank	nd	nd	nd	nd

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8260MMassReport-21732946-2_Rev3